

WHAT IS CLAIMED IS

- 1 1. A radiation therapy device, comprising:
2 a radiation source positioned to direct a beam along a beam path
3 toward a treatment area;
4 a treatment head containing a first collimator controllable to
5 selectively collimate said beam; and
6 a second collimator removably positioned between said first
7 collimator and said treatment area and controllable to selectively collimate
8 said beam.
- 1 2. The radiation therapy device of claim 1, wherein said second
2 collimator is removably mounted on an accessory tray of said radiation
3 therapy device.
- 1 3. The radiation therapy device of claim 2, further comprising a first
2 collimator drive and a second collimator drive, each said drive operable to
3 selectively position individual leafs of said collimators.
- 1 4. The radiation therapy device of claim 3, wherein said second
2 collimator drive is removably mounted on said accessory tray.
- 1 5. The radiation therapy device of claim 4, wherein said second
2 collimator drive is positioned on an exterior of said accessory tray a
3 distance from said beam path.
- 1 6. The radiation therapy device of claim 1, wherein said radiation
2 source includes a photon radiation source and an electron radiation
3 source.

1 7. The radiation therapy device of claim 2, wherein said first collimator
2 is controllable to selectively collimate a photon beam generated by said
3 photon radiation source.

1 8. The radiation therapy device of claim 2, wherein said second
2 collimator is controllable to selectively collimate an electron beam
3 generated by said electron radiation source.

1 9. The radiation therapy device of claim 1, wherein said first and said
2 second collimators are controllable to selectively collimate said beam.

1 10. The radiation therapy device of claim 1, further comprising:
2 a helium-filled container, positioned along said beam path between
3 said beam source and said second collimator.

1 11. The radiation therapy device of claim 1, further comprising a control
2 unit coupled to said radiation source and to said first and said second
3 collimator drives to selectively deliver a prescribed dose of radiation to said
4 treatment area.

12. The radiation therapy device of claim 11, wherein said control unit is operable to control said radiation source to generate a photon beam and to cause said second collimator drive to position leaves of said second collimator away from said beam path to deliver a prescribed dose of photon radiation to said treatment area.

1 13. The radiation therapy device of claim 11, wherein said control unit is
2 operable to control said radiation source to generate an electron beam and
3 to cause said first collimator drive to position leaves of said first collimator

4 away from said beam path to deliver a prescribed dose of electron
5 radiation to said treatment area.

1 14. A radiation therapy device, comprising:

2 a control unit;

3 a radiation source, controlled by said control unit to generate one of
4 a photon beam and an electron beam along a beam path toward a
5 treatment area;

6 a first collimator, positioned between said radiation source and said
7 treatment area, said first collimator selectively positioned by said control
8 unit to collimate said photon beam; and

9 a second collimator, removably mounted between said first
10 collimator and said treatment area, said second collimator selectively
11 positioned by said control unit to collimate said electron beam.

1 15. The radiation therapy device of claim 14, wherein said second
2 collimator is removably mounted on an accessory tray of said radiation
3 therapy device.

1 16. The radiation therapy device of claim 14, further comprising:
2 a container positioned along said beam path between said first and
3 second collimators.

1 17. The radiation therapy device of claim 16, wherein said container is
2 filled with helium.

1 18. The radiation therapy device of claim 15, further comprising drive
2 electronics coupled between said control unit and said second collimator,
3 said drive electronics mounted on an exterior of said accessory tray, and
4 operable to position individual leaves of said second collimator.

1 19. A radiation therapy system, comprising:
 2 a control unit;
 3 a treatment head having an enclosed area and an accessory tray;
 4 a photon radiation source, selectively operated by said control unit
 5 to generate a photon beam along a beam path from said treatment head
 6 toward a treatment zone;
 7 an electron radiation source, selectively operated by said control
 8 unit to generate an electron beam along said beam path from said
 9 treatment head toward said treatment zone;
 10 a photon collimator, located between said photon radiation source
 11 and said treatment zone; and
 12 an electron collimator, removably mounted on said accessory tray,
 13 said electron collimator selectively positioned by said control unit to
 14 collimate said electron beam.

1 20. An electron collimator for use in collimating an electron beam in a
 2 radiation therapy device, the collimator comprising:
 3 drive electronics, removably mounted on an exterior of an accessory
 4 tray of said radiation therapy device; and
 5 a plurality of leaves positionable by said drive electronics to move
 6 across a path of said electron beam, said plurality of leaves removably
 7 mounted on said accessory tray of said radiation therapy device.

1 21. A radiation therapy device, comprising:
 2 a radiation source positioned to selectively direct an electron beam
 3 and a photon beam along a beam path toward a treatment area;
 4 a treatment head containing a first collimator controllable to
 5 selectively collimate said photon beam; and
 6 a second collimator positioned between said first collimator and said
 7 treatment area and controllable to selectively collimate said electron beam.

1 22. A radiation therapy method, comprising:
 2 operating a radiation source to direct a beam from a treatment head
 3 along a beam path toward a treatment area;
 4 selectively controlling a first collimator to collimate said beam;
 5 selectively controlling a second collimator to collimate said beam,
 6 said second collimator removably positioned between said first collimator
 7 and said treatment area.

1 23. A radiation therapy method, comprising:
 2 selecting between an electron treatment beam and a photon
 3 treatment beam;
 4 directing said selected beam from a radiation source along a beam
 5 path toward a treatment area;
 6 selectively controlling a first collimator to collimate said selected
 7 beam if said selected beam is said photon beam; and
 8 selectively controlling a second collimator to collimate said selected
 9 beam if said selected beam is said electron beam, wherein said second
 10 collimator is positioned between said first collimator and said treatment
 11 area.